

A NEW SPECIES OF SPINIBDELLA FROM  
UTAH (BDELLIDAE: ACARINA)<sup>1</sup>

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Atyeo (*A revision of the mite family Bdellidae in North and Central America* [Acarina, Prostigmata]. Bull. Univ. Kansas 40(8): 345-499, 1960 reported *Spinibdella corticus* (Ewing) and *cronini* (Baker and Balock) from Utah in his revision of the family Bdellidae. Apparently additional records of this genus have not been reported from the state since. The following description is of a species of *Spinibdella* collected from apple tree bark at Spring Lake, Utah Co., Utah. I am grateful to Warren T. Atyeo for his examination of this species.

*Spinibdella mali*, n. sp.

DIAGNOSIS.—The new species is similar to *depressa* (Ewing), but can easily be separated by the presence of two pairs of eyes. It is separated from *bifurcata* (Atyeo) by the first interspace which is more than twice as long as the length of the internal dorsals. Repeated efforts to collect additional specimens have not been successful.

FEMALE.—Color unknown. Body striated throughout; divided by a suture into propodosoma and hysterosoma; length, including gnathosoma, 696 $\mu$ . Gnathosoma length, 165 $\mu$ ; chelicera (Fig. 3) striated; length, 134 $\mu$ ; two strong setae; small sharp chela. Palpi (Fig. 4) short, striated; tibiotarsus extending beyond hypostome; palpal segment lengths: I, 10 $\mu$ ; II plus III, 111 $\mu$ ; IV, 16 $\mu$ ; V, 41 $\mu$ ; ventral end seta, 116 $\mu$ ; dorsal end seta, 152 $\mu$ . Hypostome with striations transverse at proximal end, longitudinal at distal end; two pairs of strong ventral setae; length, 149 $\mu$ . Dorsal propodosoma (Fig. 1) with infrequently broken striae; two pairs of eyes, the posterior pair being larger than the anterior. Propodosomals slightly plumose; anterior 41 $\mu$  long, posterior 31 $\mu$  long; distance between anterior propodosomals 75 $\mu$ ; distance between posterior propodosomals 46 $\mu$ ; distance between anterior sensillae, 39 $\mu$ ; distance between posterior sensillae, 95 $\mu$ ; striae directed forward between posterior propodosomals. Dorsal hysterosoma striations only occasionally broken. Setae all slightly plumose; length of external humerals, 44 $\mu$ ; internal humerals, 31 $\mu$ ; internal dorsals, 31 $\mu$ ; internal lumbrals, 34 $\mu$ ; internal sacrals, 34 $\mu$ ; external sacrals, 39 $\mu$ ; internal clunals 36 $\mu$ ; post anals, 36 $\mu$ . Distance between external and internal humerals, 83 $\mu$ ; between internal humerals and internal dorsals (first interspace), 77 $\mu$ ; between internal dorsals and internal lumbrals, 85 $\mu$ ; between internal lumbrals and internal sacrals, 106 $\mu$ . Anal border striae parallel; two

1. This study was supported in part by a grant (12-14-100-8029(33)) from the U. S. Department of Agriculture to Brigham Young University.

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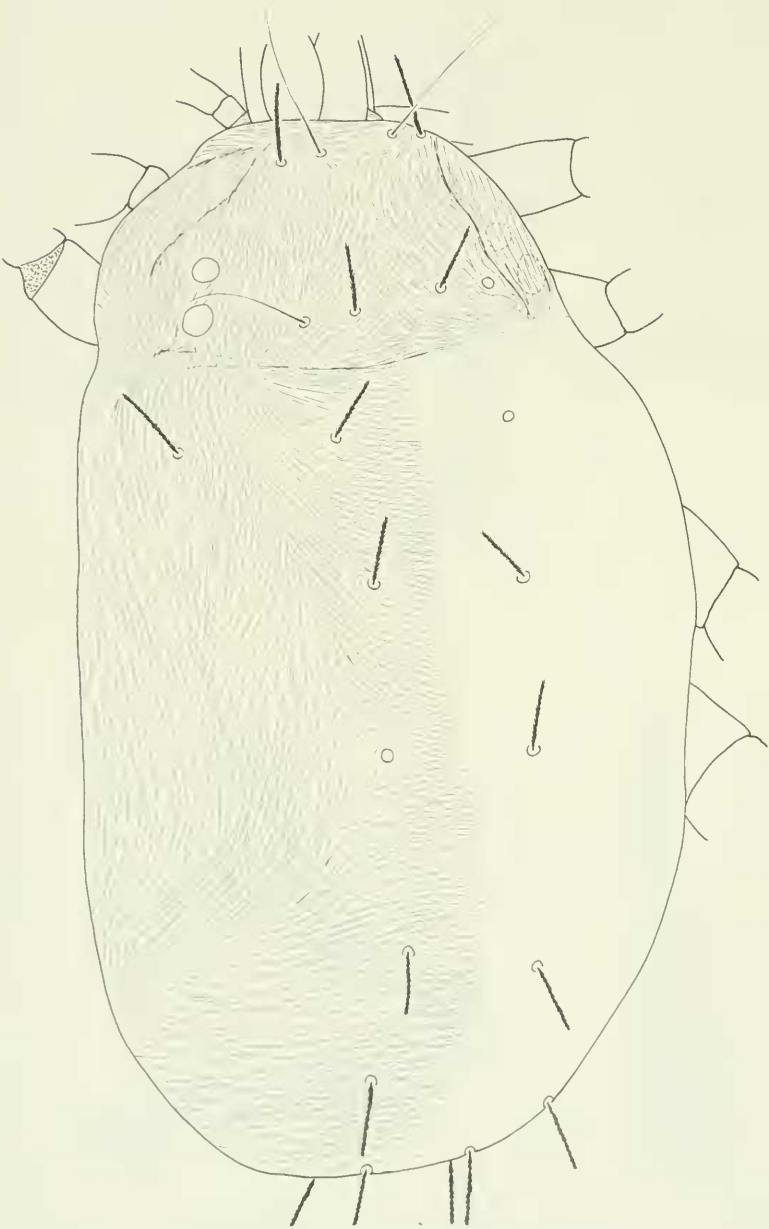


Figure 1. Dorsal view of *Spinibdella mali*.

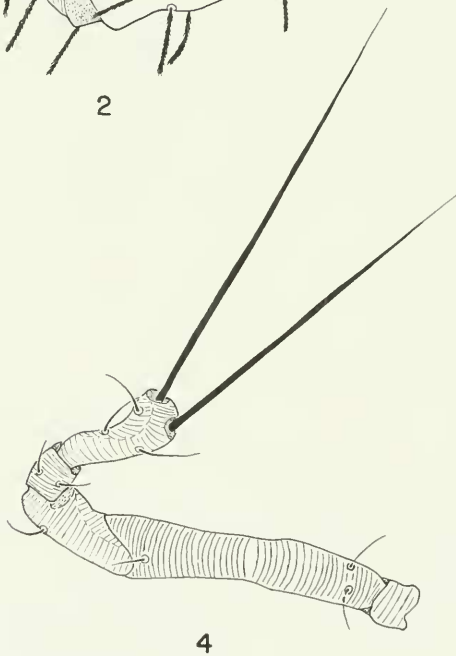
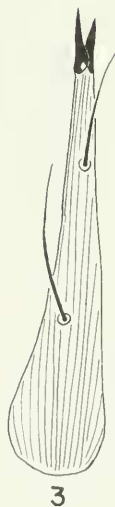
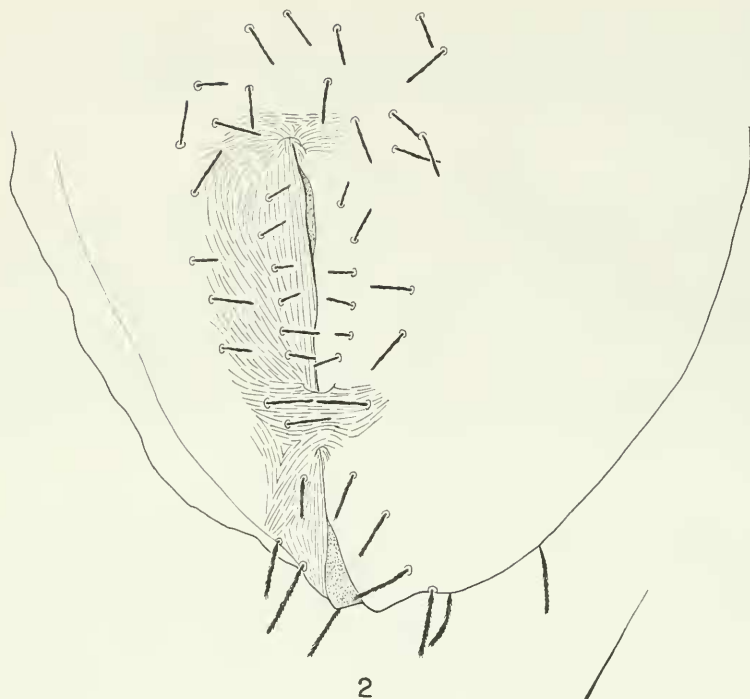


Figure 2. Genital area of *Spinibdella mali*.  
Figure 3. Chelicera of *Spinibdella mali*.  
Figure 4. Left palpus of *Spinibdella mali*.

pairs of anal setae, one pair of paranals; anal setae undulate but not plumose; paranals slightly plumose; anterior anals length  $23\mu$ ; posterior anals length,  $28\mu$ ; paranals length,  $34\mu$ . *Genital* plates (Fig. 2) with six pairs of genital setae; twelve pairs of paragenitals; setae in genital area appear brittle, several broken, always blunt and undulate. *Legs* with small strong unadorned claws, shorter than pretarsus. Measurements: tibia I-IV, 54, 59, 61,  $72\mu$ ; tarsus I-IV, 75, 77, 88,  $90\mu$ . Chaetotaxy: trochanter I-IV, 1, 1, 2, 1; basifemur I-IV, 5, 5, 6, 3; telofemur I-IV, 4, 4, 4, 4; genu I-IV, 5, 5, 6, 7; tibia I-IV, 12, 11, 11, 10; tarsus II-IV, 16, 17, 16; one small blunt sensory rod of tibia II deeply recessed. Condition of specimen prevented more detailed descriptions of leg chaetotaxy.

MALE.—Unknown.

HOLOTYPE.—A single female was collected from the bark of an apple tree at Spring Lake, Utah Co., Utah, on September 28, 1965. The type specimen is deposited in the author's collection at Brigham Young University, Provo, Utah.